

Notice of Allowability	Application No.	Applicant(s)	
	09/762,105	MALIGA ET AL.	
	Examiner	Art Unit	
	Anne R. Kubelik	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to response filed 12/6/04.
2. ☒ The allowed claim(s) is/are 4-5 and 8-17, renumbered 1-13, respectively.
3. ☒ The drawings filed on Feb 2, 2001
Dec 8, 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

PROPOSED Examiner's Amendment

1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment that places this application in condition for allowance. During a telephone conversation conducted on 15 January 2005, Kathleen Rigout requested an extension of time for 3 MONTH(S) and authorized the Commissioner to charge Deposit Account No. 04-1406 the required fee of \$455 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

IN THE CLAIMS:

Claim 4 (Currently Amended): A recombinant DNA construct for expressing at least one heterologous protein in the plastids of higher plants, wherein said construct comprising comprises a chimeric 5' regulatory region ~~which includes a promoter element, a leader sequence and a downstream box element~~ operably linked to a coding region of said at least one heterologous protein, wherein said chimeric 5' regulatory region comprises a promoter element, a leader sequence and a downstream box element and enhances ~~enhancing~~ translational efficiency of an mRNA molecule encoded by said DNA construct, relative to constructs lacking said chimeric regulatory region, and wherein said chimeric 5' regulatory region being is PrnLT7g10+DB/Ec (SEQ ID NO:14).

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Claim 8 (Currently Amended): The DNA construct as claimed in claim 4, wherein the coding region is said heterologous protein is expressed from a synthetic bar encoding nucleic acid, wherein said synthetic bar encoding nucleic acid is selected from the group consisting of SEQ ID NO:19 and SEQ ID NO:20.

Claim 9 (Currently Amended): The DNA construct as claimed in claim 4, wherein said ~~at least one~~ heterologous protein ~~comprising~~ is a fusion protein.

Claim 10 (Currently Amended): The DNA construct as claimed in claim 9, wherein said fusion protein is encoded by a first and second coding region, ~~said coding regions being operably linked to said chimeric 5' regulatory region such that production of said fusion protein is regulated by said chimeric 5' regulatory region,~~ wherein said first coding region ~~encoding~~ encodes a selectable marker and said second coding region ~~encoding~~ encodes a fluorescent molecule to facilitate visualization of transformed plant cells.

Claim 12 (Currently Amended): The DNA construct as claimed in claim 9, wherein said fusion protein ~~being~~ is encoded by a polynucleotide consisting of an aadA coding region operably linked to a green fluorescent protein coding region.

Claim 13 (Currently Amended): The DNA construct as claimed in claim 12, wherein said aadA coding region ~~being~~ is operably linked to said green fluorescent protein coding region via a nucleic acid molecule encoding a peptide linker comprising an amino acid sequence selected

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from the group consisting of ELVEGKLELVEGLKVA (SEQ NO:104) and ELAVEGKLEVA (SEQ ID NO:105).

Claim 14 (Currently Amended): The DNA construct as claimed in claim 10, wherein said construct ~~comprising~~ comprises a sequence selected from the group of SEQ ID NOS: 21, 22, 23, 24, and 25.

Claim 15 (Currently Amended): A plasmid for transforming the plastids of higher plants, wherein said plasmid ~~being~~ is selected from the group consisting of PMSK49 and pMSK35.

Claim 16 (Currently Amended): A transgenic plant ~~containing~~ comprising the plasmid as claimed in claim 15.

Claim 17 (Currently Amended): The transgenic plant as claimed in claim 16, wherein said plant ~~being selected from the group consisting of monocots and dicots~~ is a monocot or a dicot.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, whose telephone number is (571) 272-0801. The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (571) 272-0804. The central fax number for official correspondence is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is

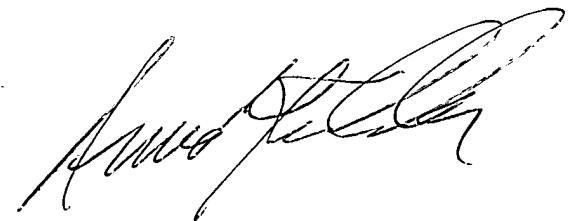
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(866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Anne R. Kubelik, Ph.D.

January 14, 2005

A handwritten signature in black ink, appearing to read 'Anne R. Kubelik', written in a cursive style.

**ANNE KUBELIK
PATENT EXAMINER**